

DIRECT TESTIMONY
OF
GREG ROCKROHR
ENGINEERING DEPARTMENT
ENERGY DIVISION
ILLINOIS COMMERCE COMMISSION

Central Illinois Public Service Company
d/b/a AmerenCIPS

DOCKET NO. 07-0532

Petition for a Certificate of Public Convenience and Necessity,
pursuant to Section 8-406 of the Illinois Public Utilities Act, to
construct, operate and maintain new 138,000 volt electric lines in
Madison County, Illinois.

February 21, 2008

1 Q. **What is your name and business address?**

2 A. My name is Greg Rockrohr. My business address is 527 East Capitol Avenue,
3 Springfield, Illinois 62701.

4 Q. **By whom are you employed and in what capacity?**

5 A. I am employed by the Illinois Commerce Commission ("Commission") as a Senior
6 Electrical Engineer in the Energy Division. In this position I review various
7 planning and operating practices of electric utilities that operate in Illinois, and at
8 times provide opinions or guidance to the Commission through staff reports and
9 testimony.

10 Q. **What is your educational background?**

11 A. I hold a Bachelor of Science degree in Electrical Engineering from Valparaiso
12 University, and am a registered professional engineer in the state of California.

13 Q. **What is your prior work experience?**

14 A. Prior to coming to the Commission in 2001, I was employed as an electrical
15 engineer by Pacific Gas and Electric Company for 18 years. Prior to that, I was
16 an electrical engineer at Northern Indiana Public Service Company for three
17 years.

18 Q. **What is the purpose of your testimony?**

19 A. On October 29, 2007, Central Illinois Public Service Company, d/b/a
20 AmerenCIPS ("AmerenCIPS") filed a petition requesting that the Commission
21 grant it a Certificate of Public Convenience and Necessity ("CPCN"), pursuant to
22 Section 8-406 of the Illinois Public Utilities Act (the "Act") (220 ILCS 5/8-406) to
23 construct, operate, and maintain two new 138 kilo-volt ("kV") transmission lines
24 within its service territory in Madison County, Illinois. In addition, AmerenCIPS'

petition includes a request for an order pursuant to Section 8-503 of the Act (220 ILCS 5/8-503) directing that these transmission lines be built.

Q. What is your recommendation regarding AmerenCIPS' request?

A. I recommend that the Commission grant AmerenCIPS' request for a CPCN pursuant to Section 8-406 of the Act, and grant AmerenCIPS' request for an order pursuant to Section 8-503 of the Act for one of the two transmission lines.

AmerenCIPS' Request for a CPCN

Q. What steps did you follow to arrive at your recommendation regarding a CPCN?

A. I reviewed AmerenCIPS' petition, testimony, and responses to data requests. I also conducted field inspections of the routes over which AmerenCIPS proposes to install each of the two transmission lines, as well as the alternative routes that AmerenCIPS considered. AmerenCIPS' Exhibit 3.1 illustrates these route alternatives for both the northern-most 138kV line, identified as COP Sub Tap 2, and for the southern-most 138kV line, identified as COP Sub Tap 1.

Q. What criteria did you use to develop your recommendation that the Commission grant AmerenCIPS a CPCN pursuant to Section 8-406 of the Act?

A. I used criteria included in Section 8-406 of the Act, which states:

The Commission shall determine that proposed construction will promote the public convenience and necessity only if the utility demonstrates: (1) that the proposed construction is necessary to provide adequate, reliable, and efficient service to its customers and is the least-cost means of satisfying the service needs of its customers; (2) that the utility is capable of efficiently managing and supervising the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision thereof; and (3) that the utility is capable of financing

the proposed construction without significant adverse financial consequences for the utility or its customers.

My investigation examined: (1) whether AmerenCIPS' construction of the proposed 138kV transmission lines is necessary for AmerenCIPS to provide adequate, reliable, and efficient service to its customers, and whether constructing these facilities is the least-cost means for AmerenCIPS to satisfy the service needs of its customers; (2) whether AmerenCIPS is capable of efficiently managing and supervising the construction process; and (3) whether constructing the proposed transmission lines will result in significant adverse financial consequences for AmerenCIPS or its customers.

Q. Why does AmerenCIPS propose to build the two 138 kV transmission lines?

A. AmerenCIPS indicated that it proposes to build one of the transmission lines to supply increasing electric loads at Wood River Refinery (the "refinery"), and the second transmission line because the refinery owner requested two sources of 138kV supply, rather than one. AmerenCIPS learned that the peak electric load at the refinery will increase from 150 mega-Watts ("MW") in 2007 to 240 MW by 2012.¹ On July 6, 2006, ConocoPhillips Corporation, the parent corporation of the Wood River Refinery owner, requested that AmerenCIPS provide 138kV service to the refinery to supply existing and anticipated electric loads.² AmerenCIPS presently supplies the refinery with seven different 34.5kV circuits. AmerenCIPS' witness Brownfield stated that WRB Refining, LLC requested that AmerenCIPS provide two 138kV sources to its proposed customer-owned

¹ AmerenCIPS Exhibit 1.0, lines 83-94.

² Refer to AmerenCIPS' response to Staff data request GER 1.2, included as Attachment A.

substation,³ and requested that AmerenCIPS' construction of the proposed 138kV transmission lines be completed by September 1, 2009.⁴

Q. **Based upon information AmerenCIPS provided, do you agree that it is necessary that AmerenCIPS modify its electric service to Wood River Refinery so that the refinery receives electricity at 138kV rather than 34.5kV?**

A. Yes. I support the modification because:

- Supplying large electric loads at a higher voltage reduces line losses and voltage drop, so that the service to the refinery at 138kV would be more efficient.
- The change in delivery voltage to 138kV from 34.5kV will result in lower delivery service charges for WRB Refining, LLC.⁵
- Supplying the refinery with 138kV lines that are dedicated to the refinery means both the refinery and other area customers should experience more reliable service. This is because, after project completion, reliability issues or outages on AmerenCIPS' 34.5kV system will no longer affect the refinery. In addition, AmerenCIPS plans to remove the portions of its 34.5kV system that now supplies the refinery following its construction of the new 138kV facilities, thus reducing exposure on the remaining 34.5kV system that supplies other customers in the area.

Q. **AmerenCIPS' Exhibit 3.1 illustrates three possible routes for each of the two 138kV transmission lines that AmerenCIPS is proposing to build: the**

³ AmerenCIPS Exhibit 1.0, lines 112-114.

⁴ AmerenCIPS Exhibit 1.0, lines 126-127.

primary route and two alternative routes. Would utilizing any of the alternative routes for each of the proposed transmission lines result in lower project costs than utilizing the primary route?

A. Not in my opinion. AmerenCIPS estimated that constructing the two transmission lines will cost approximately \$14.3 million. In AmerenCIPS Exhibit 3.3, AmerenCIPS provided cost estimates associated with each of the route alternatives illustrated by AmerenCIPS Exhibit 3.1 with an accuracy confidence of +/-20%.⁵ Since AmerenCIPS' cost estimate for the costliest route is less than 20% higher than the lowest cost route for each of the two transmission lines proposed, I concluded that cost was not a dependable determinant for deciding which of the route alternatives should be selected. Even so, AmerenCIPS' preferred route for COP Sub Tap 1, has the lowest estimated associated cost, and its preferred route for COP Sub Tap 2 has an estimated associated cost that is less than 1% higher than the estimate for the lowest cost alternative. A significant advantage associated with each of the primary routes that AmerenCIPS chose is that a large portion of the route is on property owned by the refinery itself, so that land procurement costs and landowner impacts would be minimized.

Q. Do you have any additional comments about the routes AmerenCIPS proposes based upon your field inspection of the alternatives?

A. Yes. On January 23, 2008, I met AmerenCIPS' witness Chapman near the Wood River Refinery to inspect each of the six routes that AmerenCIPS

⁵ AmerenCIPS Exhibit 1.0, lines 135-139.

⁶ Refer to AmerenCIPS' response to Staff data request GER 1.25, included as Attachment B.

considered. Following my inspection of the various routes, and my questioning of Mr. Chapman, I concluded that the route AmerenCIPS selected for each of the two proposed transmission lines was a good choice. The general area that the proposed transmission lines must cross is very congested with refinery and utility facilities, so that identifying possible routes would be difficult. Even so, it appeared to me that AmerenCIPS selected a route for each line that minimized impacts on area landowners other than WRB Refining, LLC, the owner of the refinery. In addition, although I did not note any obvious environmental impacts associated with the two primary routes that AmerenCIPS selected, AmerenCIPS' witnesses Lynn and Girman affirmed in direct testimony that AmerenCIPS will comply with all permit and mitigation requirements.

Q. **Is AmerenCIPS capable of efficiently managing and supervising the construction of the transmission lines?**

A. In my opinion, yes. In paragraph 6 of its petition, AmerenCIPS stated it is capable of efficiently managing and supervising construction of the project. AmerenCIPS' service territory along with the territory of its affiliates, AmerenCILCO and AmerenIP, cover the southern two-thirds of Illinois. AmerenCIPS and its affiliates own, operate, and maintain hundreds of miles of transmission lines in the State. I have no reason to doubt AmerenCIPS' assertion made in its petition that it is capable of efficiently managing and supervising the construction of the two transmission lines proposed in this proceeding.

Q. **Will constructing the proposed transmission lines result in significant adverse financial consequences for AmerenCIPS or its customers?**

A. No. AmerenCIPS stated that WRB Refining, LLC would be paying the entire cost to install the two new 138kV transmission lines, including progress payments for each stage of construction.⁷

AmerenCIPS' Request for an Order Pursuant to Section 8-503 of the Act

Q. **AmerenCIPS requested both a CPCN pursuant to Section 8-406 of the Act and an order pursuant to Section 8-503 of the Act. What is your understanding of the relationship between a CPCN pursuant to Section 8-406 of the Act, and a Commission order pursuant to Section 8-503 of the Act?**

A. While I am not an attorney, I understand that prior to constructing new facilities, such as the 138kV transmission lines that AmerenCIPS proposes in this proceeding, an electric utility must obtain a CPCN from the Commission pursuant to Section 8-406 of the Act. I understand that with a CPCN the Commission grants the utility permission to construct the facilities it proposes. However, even after receiving a CPCN pursuant to Section 8-406 of the Act, the utility may still choose not to construct the project. By issuing an order pursuant to Section 8-503 of the Act, the Commission can direct the utility to construct the project. Section 8-503 of the Act states, in relevant part:

Whenever the Commission, after a hearing, shall find that additions, extensions, repairs or improvements to, or changes in, the existing plant, equipment, apparatus, facilities or other physical property of any public utility or of any 2 or more public utilities are necessary and ought reasonably to be made or that a new structure or structures is or are necessary and should be erected, to promote the security or convenience of its employees or the public or promote the development of an effectively competitive electricity market, or in any other way to secure adequate service or facilities,

⁷ AmerenCIPS Exhibit 1.0, lines 152-156.

169 the Commission shall make and serve an order authorizing or
170 directing that such additions, extensions, repairs, improvements or
171 changes be made, or such structure or structures be erected at the
172 location, in the manner and within the time specified in said order...

173 Once the Commission directs a utility to complete a project, the utility no longer
174 has the option to not construct it.

175 Q. **Why did AmerenCIPS request that the Commission issue an order**
176 **pursuant to Section 8-503 of the Act that would take away its choice**
177 **as to whether or not to build the proposed transmission lines?**

178 I know of no reason for AmerenCIPS to request an order pursuant to Section 8-
179 503 of the Act other than to receive eminent domain authority to obtain property
180 rights. To be granted eminent domain authority, AmerenCIPS would need to
181 meet the requirements of Section 8-509 of the Act (220 ILCS 5/8-509), which
182 would be to receive authority or a directive, under Section 8-503 of the Act.

183 Section 8-509 of the Act states, in relevant part:

184 When necessary for the construction of any alterations, additions,
185 extensions or improvements ordered or authorized under Section
186 8-503 or 12-218 of this Act, any public utility may enter upon, take
187 or damage private property in the manner provided for by the law of
188 eminent domain.

189 My reading of Section 8-509 of the Act leads me to conclude that if the
190 Commission were to issue an order pursuant to 8-503 of the Act, as
191 AmerenCIPS requests, AmerenCIPS would, in practical terms, be receiving
192 eminent domain authority. To explain: while I am not an attorney, I do not
193 believe that Section 8-509 of the Act requires a separate Commission
194 proceeding to obtain eminent domain authority, rather it confirms that with
195 authorization under Section 8-503 of the Act comes eminent domain authority.

Thus, for example, if a utility attempted to file for eminent domain authority pursuant to Section 8-509 of the Act, the only showing the utility would have to make would be to demonstrate that the Commission previously directed or authorized the utility to construct the project pursuant to Section 8-503 of the Act. This is why I believe, in practical terms, an order pursuant to Section 8-503 of the Act has the effect of granting eminent domain authority, even though AmerenCIPS did not formally request eminent domain authority in its petition.

Q. Are you familiar with any proceedings at the Commission where the relationship between Section 8-503 and Section 8-509 of the Act that you just described was confirmed?

A. Yes. In the final order for Docket No. 05-0188, in which ComEd requested an order pursuant to Section 8-503 of the Act, the Commission stated:

Under the terms of Section 8-503 of the Act, when the Commission finds that improvements or additions to existing plant are necessary and ought reasonably to be made, it is authorized to enter an order directing that the improvements be made. When such an order is entered, Section 8-509 of the Act then authorizes the utility to use the power of eminent domain if necessary to obtain property necessary for the improvements. The issue before the Commission is whether an 8-503 order empowering ComEd to use eminent domain, should be entered in this case.

It is my opinion that the Commission, in its final order for Docket No. 05-0188, corroborated my understanding of the relationship between an order pursuant to Section 8-503 of the Act and the granting of eminent domain authority pursuant to Section 8-509 of the Act.

Q. Is it necessary for AmerenCIPS to construct two transmission lines to supply the refinery?

A. It is my position that only one of the two 138kV transmission lines that AmerenCIPS proposes in this proceeding is necessary to supply the Wood River Refinery load, and the other transmission line is necessary only because WRB Refining, LLC requested it. This is the reason I would support a Commission order pursuant to Section 8-503 of the Act to be associated with the northern-most route that AmerenCIPS proposes: COP Sub Tap 2 –Primary. COP Sub Tap 2 –Primary is shorter and would result in lower costs than the southern-most route, COP Sub Tap 1 –Primary. Therefore, COP Sub Tap 2 –Primary would be the best route over which to construct a 138kV transmission line to supply Wood River Refinery. I do not believe AmerenCIPS should receive eminent domain authority to obtain property rights in order to build COP Sub Tap 1-Primary, so I recommend that the Commission not include that route in its order pursuant to Section 8-503 of the Act. To clarify: I believe it is reasonable for AmerenCIPS to provide Wood River Refinery with two 138kV sources, as WRB Refining, LLC requests, as long as (1)WRB Refining, LLC pays for the second transmission line;⁸ and (2) constructing the second transmission line does not inconvenience other property owners.

Q. How might AmerenCIPS' construction of a second 138kV transmission line inconvenience other property owners?

A. If AmerenCIPS needs to utilize eminent domain authority to take or damage property over the objections of the affected property owners in order to construct the second 138kV transmission line, then it is my position that those affected

⁸ Petition, paragraph 7.

property owners would be inconvenienced. Moreover, if AmerenCIPS is not requesting eminent domain authority under Section 8-509 of the Act in this proceeding, but will file for such authority in a subsequent proceeding, I further believe that affected land owners will have lost their opportunity to be fully heard, as eminent domain authority was already granted under Section 8-503 of the Act. For these reasons, I recommend that the Commission limit any order issued pursuant to Section 8-503 of the Act to include only the COP Sub Tap 2 –Primary route, as shown on AmerenCIPS Exhibit 3.1. I recommend the Commission not issue an order that would result in AmerenCIPS receiving eminent domain authority for the COP Sub Tap 1 –Primary route since that second route would be constructed only because WRB Refining, LLC requested two sources of 138kV, rather than one. On the other hand, if property owners voluntarily sell or convey AmerenCIPS and/or WRB Refining, LLC adequate property rights so that AmerenCIPS can construct the second 138kV transmission line over the COP Sub Tap 1 –Primary route without the use of eminent domain authority, I can think of no reason for the Commission to withhold a CPCN for that second transmission line.

Q. **Do you have any additional comments regarding AmerenCIPS' request for an order pursuant to Section 8-503 of the Act?**

A. Yes. AmerenCIPS makes it clear that the project proposed in its petition is to be constructed for the sole benefit of WRB Refining, LLC.⁹ Therefore, regardless of whether the Commission adopts my recommendation to limit any order issued pursuant to Section 8-503 of the Act to the one route identified on AmerenCIPS

268 Exhibit 3.1 as COP Sub Tap 2 –Primary, I recommend that the Commission’s
269 order direct AmerenCIPS to construct the transmission lines only if all costs for
270 constructing the lines are borne by WRB Refining, LLC, or borne by WRB
271 Refining, LLC’s successor. The Commission would then not be obligating
272 AmerenCIPS, through its order, to construct the project even if expansion at
273 Wood River Refinery develops in a different manner than AmerenCIPS and WRB
274 Refining, LLC now expect.

275 Q. **Does this conclude your prepared direct testimony?**

276 A. Yes.

⁹ AmerenCIPS Exhibit 1.0, lines 144-151.

**AmerenCIPS' Response to
Illinois Commerce Commission Data Requests
ICC Docket No. 07-0532
Petition for Certificate of Public Convenience and Necessity**

GER 1.2: Please provide a copy of WRB Refining's request to AmerenCIPS that AmerenCIPS modify the electric supply to Wood River Refinery to 138 kV from 34 kV.

Response: The concept of converting the refinery from 34.5 kV to 138 kV supply had been discussed by AmerenCIPS and ConocoPhillips, WRB Refining's parent, for a number of years, with various studies and meetings on the subject.

More recently, refinery electrical engineer Mark Teske and Ameren key account executive, Jonathan Wheeler, discussed the subject in a telephone call on Thursday, April 27, 2006 regarding refinery expansion. When Teske stated that the refinery was once again exploring such a conversion, Wheeler called an internal Ameren meeting to discuss the technical and policy issues associated with such a project.

Finally, immediately subsequent to a total refinery outage caused by the weather event that devastated the larger part of the metro St. Louis area on June 18, 2006, refinery manager, Herman Seedorf, called Jonathan Wheeler the morning of Monday, June 19, 2006, to request a meeting between high level officials of both companies. The purpose of the meeting was to determine whether or not Ameren would serve the refinery, both the existing plant and proposed expansion, at 138 kV.

A meeting was arranged for Thursday, July 6, 2006, that was attended by numerous employees of both companies, including ConocoPhillips' Larry Ziemba - President, Central & West Coast Refining; John Askounis - Manager of Business Analysis; Joan Walker-Ratliff - Director Regulatory Affairs; Mark Teske - Electrical Engineering Team Leader; and Ameren's Ronald Pate - Director, Regional Operations; Tobie Grover - Division Manager; Robert Mill - Director, Regulatory Policy and Planning; Edward Pfeiffer - Manager Electric Planning; and Gary Brownfield - Supervising Engineer, Transmission Planning. It was at this meeting that ConocoPhillips officially made the request for 138 kV electric service to the entire refinery, existing and proposed.

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Date: December 11, 2007

AmerenCIPS' Response to
Illinois Commerce Commission Data Requests
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GER 1.25: AmerenCIPS Exhibit 3.3 shows AmerenCIPS' project cost estimate for the various alternative routes presented in the petition. Please quantify AmerenCIPS' confidence level (+/-%) in the accuracy of these cost estimates.

Response: AmerenCIPS' confidence level in the accuracy of cost estimate provided in AmerenCIPS Exhibit 3.3 is +/- 20%.

Prepared By: James Neal Chapman
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